ABSTRACT

Transform coefficients for blocks of pixels in an original picture are quantized to produce respective sets of quantization indices for the blocks of pixels. The quantization indices for at least some of the blocks are produced by using a quantization step size that is not uniform within each block. Largest magnitude quantization indices are selected from the respective sets of quantization indices for (run, level) encoding to produce the (run, level) encoded picture. For example, MPEG-2 coded video includes a set of non-zero AC discrete cosine transform (DCT) coefficients for 8x8 blocks of pixels. For scaling the MPEG-2 coded video, non-zero AC DCT coefficients are removed from the MPEG-2 coded video to produce reduced-quality MPEG-2 coded video that includes no more than a selected number of largest magnitude quantization indices for the non-zero AC DCT coefficients for each 8x8 block.